## AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application. Please cancel claims 1-40, 42, 43, 45-48, 53, 58, 61, 63, 67-70, and 72-113 without prejudice. Please amend the claims as indicated below without prejudice.

- 1-40. (Canceled without prejudice).
- 41. (Currently Amended) A library consisting of a plurality of water-soluble peptidic substrates, wherein each peptidic substrate member of the library has the general formula:

$$F-R_1-L_1-R_2-P_{Hcl}-P_S-P_{Hc2}-(R_3-L_2-R_4-T)_v$$

wherein \*F is a detectable moiety with a molecular weight of less than 5 kD;

- R<sub>1</sub>, R<sub>2</sub>, R<sub>3</sub>, and R<sub>4</sub> are each, independently: a covalent bond or a covalent linkage consisting of a branched or unbranched, substituted or unsubstituted, saturated or unsaturated chain of 1-10 carbon atoms; 0-3 heteroatoms selected from the group consisting of oxygen, nitrogen, and sulfur; and further consisting of at least one linkage chosen from the group consisting of ether, ester, hydrazone, amide, thioether, thioester, thiourea, disulfide and sulfonamide linkages;
- L<sub>1</sub> is a branched or unbranched, water-soluble uncharged polymer selected from the group consisting of polyethylene glycol (PEG) and polysaccharides, and having a molecular weight less than about 2000 Daltons;
- L<sub>1</sub> and L<sub>2</sub> are each, independently: is a branched or unbranched, hydrophilic watersoluble uncharged polymer selected from the group consisting of polyethylene glycol (PEG) and polysaccharides, and having a molecular weight of about 80 to about 4000 Daltons;

DO NOT enter